Guide to the Common Native Trees and Shrubs of Alberta

Edited By
Wayne Inkpen

Alberta
Environmental Protection Services
Pollution Control Division
Pesticide Chemicals Branch

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Preface

There are several references on plant identification available to Albertans. However, these publications are generally not suited for field use. This guide has been prepared to assist vegetation managers in the identification of the 29 most common woody plants found in Alberta. It is hoped that the knowledge thus gained will assist vegetation management personnel and pesticide applicators to make sound vegetation and management decisions and provide recreationalists with additional enjoyment when they are in Alberta's woodlands.

One does not require a background in forestry or botany to use this guide. A minimal number of technical terms have been used and an illustrated glossary has been included to allay any difficulties the user may have with botanical terms. To aid identification, a written description of each tree and shrub has been included, along with photographs and an illustrated line key based on leaf characteristics. Where applicable, species with similar characteristics have been noted in the narrative descriptions.

Instructions on how to use the illustrated line key are included, along with a table listing the importance of the various shrubs to wildlife, and a selected reference list for those interested in more detailed information.

Acknowledgements

Among the many people involved in the preparation of this guide, special thanks are due to the following for their noteworthy contributions: Mr. M. Allan for his line key and technical review; Mrs. J. Hrapko and Mr. D. Blackmore for their constructive suggestions, photographs and technical review; Mr. R. Vic and Dr. B. Dancik for their constructive suggestions and technical review; Mr. H. Anderson, Mr. D. Johnson and Mr. D. Pledger for their constructive suggestions and Mrs. H. Inkpen for the charts and illustrations.

Very special appreciation is extended to Mr. R. Van Eyk who was the principal contributor and force behind this guide and without whom this work could not have been completed.

Introduction

There are 12 major vegetation types in Alberta. Within each of these types one or more of the trees and shrubs listed in this guide can be found.

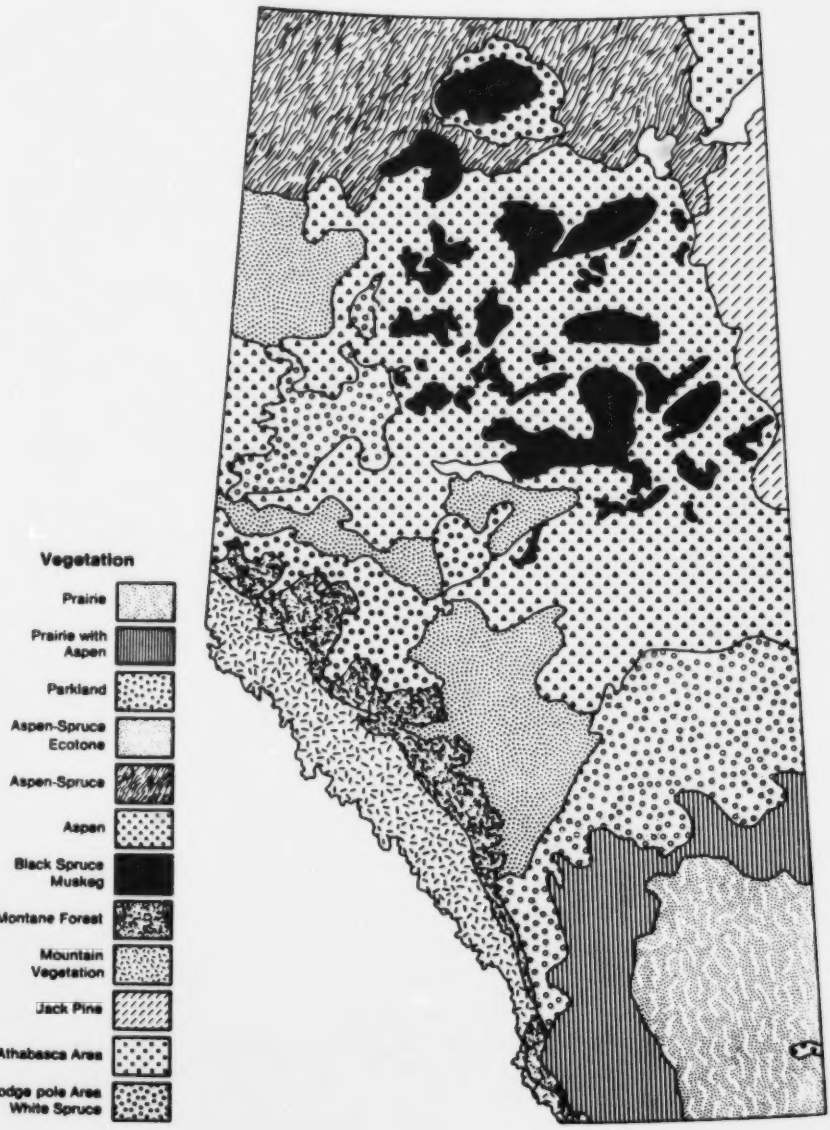
The narrative descriptions of the woody plants included in this guide follow a systematic order which is in accordance with the classification system used by botanists.

Each description is headed by the tree or shrub's common name and scientific name. The scientific names are in Latin and usually comprise two words. The first word is the generic name and the second word is the species name. The last part of the scientific name usually refers to the individual who named the plant. Scientific names were included because a tree or shrub can have one or more common names. For example, *Populus tremuloides* Michx. is known as aspen poplar, trembling aspen and white poplar. Because common names can be localized and vary from region to region the scientific name is the only name that precisely identifies a plant.

Following a plant's common and scientific names, a brief description of the plant's shape, size, leaves, flowers, fruit and distribution has been included.

Based on the characteristics of their leaves, the trees in this guide can be split into one of two groups: coniferous trees and deciduous trees. All of the shrubs in this guide are deciduous shrubs. Coniferous trees are commonly referred to as evergreens, softwoods or needle-leafed trees, and with the exception of tamarack, all of the trees in this group retain their leaves for two or more years.

The deciduous trees and shrubs are most often referred to as broadleaf trees or shrubs. Deciduous trees are also known as hardwoods. All of the trees and shrubs that fall into this group drop their leaves in the autumn.



This map has been reproduced from *Flora Of Alberta* with permission from Dr. John G. Packer. Botany Department, University of Alberta.

ILLUSTRATED GLOSSARY

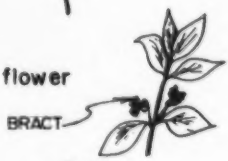
ACUMINATE: Tapering to a long, sharp point.

ACUTE: Tapering to a sharp point.

ALTERNATE: Leaves placed singly at different heights along a stem.

BLADE: Flat part of the leaf.

BRACT: Modified leaf below a flower or branch of flowers.



BRISTLY: Many fine, stiff hairs.

CATKIN: A flexible, scaly cluster of unisexed flowers.

COMPOUND: Leaf made up of several leaflets.

GLOSSARY

DELTOID: Triangular leaves.

ELLIPTICAL: Leaves that are longer than they are wide, tapering at the tip and base to an acute point.

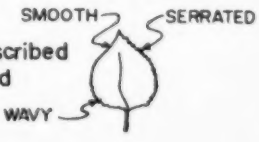
LANCEOLATE: Narrow, long leaves, broad at the base and tapering to a point at the tip.

LEAFLET: Blade of a compound leaf attached to a common leaf stem.

LINEAR: Long and narrow leaves with parallel margins.

LOBED: A particular type of leaf in which the blade is prominently indented.

MARGIN: Edge of the leaf blade, described as smooth, wavy, or serrated (toothed).



NODE: The place on the stem where the leaf originates.

GLOSSARY

OBLONG: Leaves that are longer than they are wide, rounded at the base and tip.

OBOVATE: Egg shaped leaves, broadest near the tip.

OPPOSITE: Two leaves originating at the same point on opposite sides along a stem.

OVAL: Egg shaped leaves, usually tapered at tip and leaf base.

OVATE: Egg shaped leaves, broadest at the base.

PETIOLE: Leaf stem; attaches to node and base of leaf.

PRICKLY: Sharp, thick spines attached on twigs and stems.

SERRATED: Saw-toothed.

GLOSSARY

SHEATH: A clear tubular envelope at the base of a leaf.

SIMPLE LEAF: Single bladed leaf.

VEIN: Prominent lines on the leaf blade.

WHORL: Three or more leaves or leaflets originating from the same node.

How To Use The Key

The key is an aid to help you identify the most commonly occurring woody shrubs and young sapling-size trees in Alberta on the basis of summer characteristics. In some cases, other obvious features such as bark colour and texture, are also mentioned.

On the next page is a master key outlining the organization of the main identifying features using a branching network of two contrasting features. The following steps will show you how to get the most use out of the key:

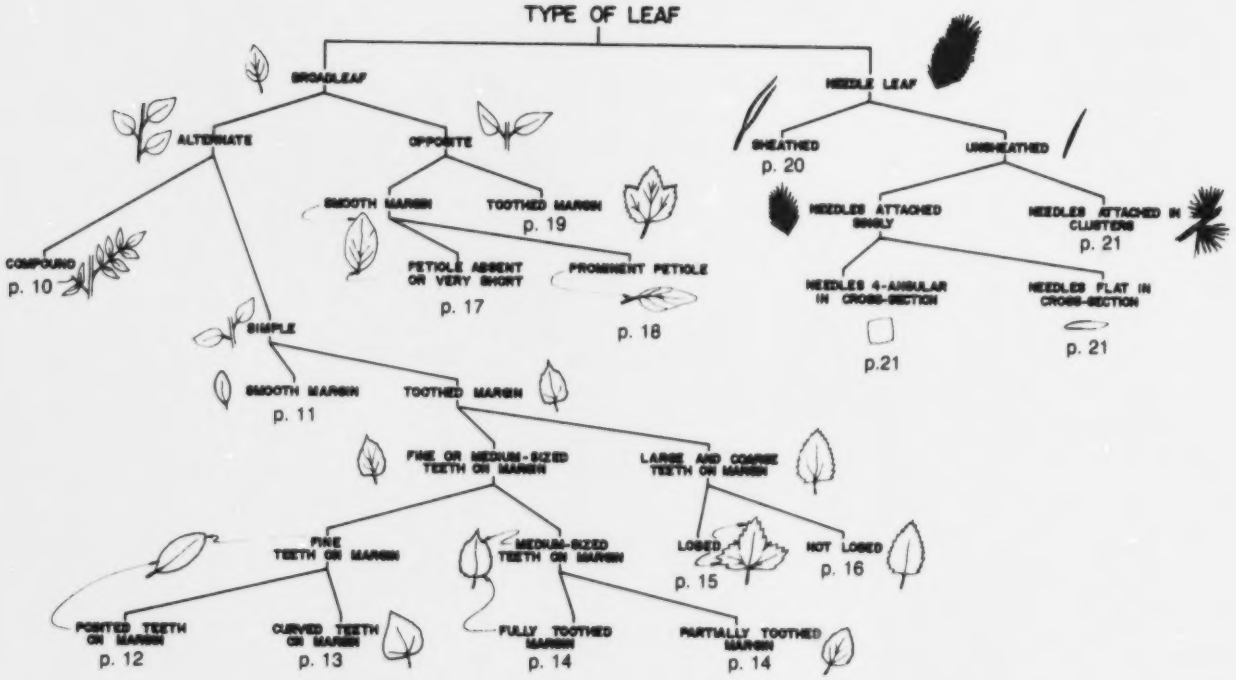
STEP 1: Start at the top of the chart (page 9) at the TYPE OF LEAF, and then work progressively down the page. You should work with at least three leaf samples taken from various parts of the plant.

STEP 2: Since trees and woody shrubs in Alberta have either a BROADLEAF character or a NEEDLE LEAF character, this step organizes all the common plants into two groups.

STEP 3: The illustrations beside each feature will guide you as to the meaning of the features used. If in doubt about a word meaning, see page 4, the ILLUSTRATED GLOSSARY OF TERMS.

STEP 4: Once you have worked your way through the chart on page 9, you will have noticed a page number beneath the last feature in that particular branch of the key. Go to that page in the text and you should see several possibilities as to the identity of the plant. You will also notice that the step-by-step feature identification which you used in the chart on page 9 is reproduced for that particular branch of the key.

STEP 5: Finally you are left to choose among several possibilities as to the exact name of the plant you are identifying. Read over each description, and determine which one best "fits" the plant you have.

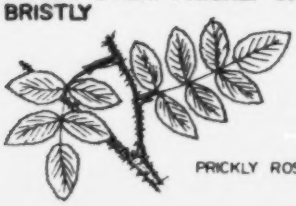

TYPE OF LEAF
BROADLEAF
NEEDLE LEAF
ALTERNATE
OPPOSITE
SHEATHED
p. 20
UNSHEATHED
SMOOTH MARGIN
TOOTHED MARGIN
p. 19
NEEDLES ATTACHED SINGLY
NEEDLES ATTACHED IN CLUSTERS
p. 21
COMPOUND
p. 10
PETIOLE ABSENT OR VERY SHORT
p. 17
PROMINENT PETIOLE
p. 18
NEEDLES 4-ANGULAR IN CROSS-SECTION
p.21
NEEDLES FLAT IN CROSS-SECTION
p. 21
SIMPLE
SMOOTH MARGIN
p. 11
TOOTHED MARGIN
FINE OR MEDIUM-SIZED TEETH ON MARGIN
LARGE AND COARSE TEETH ON MARGIN
FINE TEETH ON MARGIN
MEDIUM-SIZED TEETH ON MARGIN
LOBED
p. 15
NOT LOBED
p. 16
POINTED TEETH ON MARGIN
p. 12
CURVED TEETH ON MARGIN
p. 13
FULLY TOOTHED MARGIN
p. 14
PARTIALLY TOOTHED MARGIN
p. 14

BROADLEAF

ALTERNATE

COMPOUND

LEAFLETS ATTACHED SINGLY, WOODY STEM PRICKLY OR BRISTLY



PRICKLY ROSE

1. 3 TO 5 LEAFLETS, CRINKLY TEXTURE; STEM BRISTLY:

WILD RED RASPBERRY

p. 41

2. 5 TO 7 (USUALLY 7) LEAFLETS, NO CRINKLY TEXTURE; STEM PRICKLY

PRICKLY ROSE

p. 40

LEAFLETS CLUSTERED, WOODY STEM NOT PRICKLY

SHRUBBY CINQUEFOIL

1. 5 TO 7 LEAFLETS, VELVETY TEXTURE:

SHRUBBY CINQUEFOIL

p. 37

BROADLEAF

ALTERNATE

SIMPLE

SMOOTH MARGIN

SILVER-GREY SURFACE

1 LEAF OVATE TO OBLONG, 2.5-8 CM LONG, BROWNISH SCALES ON UNDERSIDE:

WOLF WILLOW

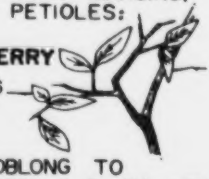
p. 42

DARK GREEN SURFACE

1 LEAF ELLIPTICAL, 1-4 CM LONG, HAIRY MARGINS, SHORT PETIOLES:

BLUEBERRY

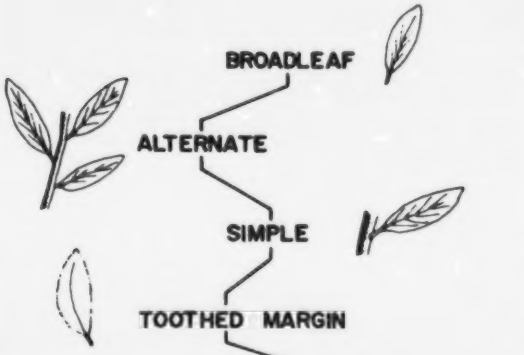
p. 46



2 LEAF OBLONG TO ELLIPTICAL, 1-5 CM LONG, RUSTY-WOOLLY UNDERSIDE:

LABRADOR TEA

p. 45



BROADLEAF

ALTERNATE

SIMPLE

TOOTHED MARGIN

TEETH FINE OR MEDIUM

TEETH FINE

TEETH POINTED

BUMPS ON PETIOLE

1 LEAF LANCEOLATE, PETIOLE RED NEAR LEAF BASE, SHARP-POINTED LEAF TIP:

PIN CHERRY
p. 38

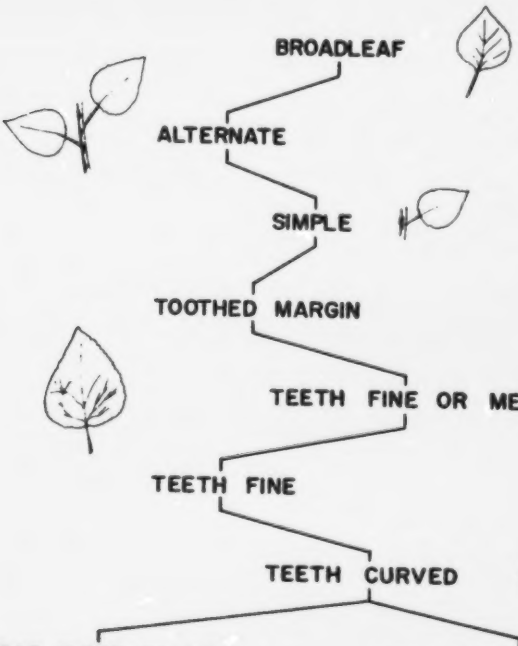
2 LEAF OBOVATE, PETIOLE GREEN, ABRUPT SHARP-POINTED LEAF TIP, THICK LEAF:

CHOKE CHERRY
p. 39

NO BUMPS ON PETIOLE

1 LEAF LONG AND NARROW, USUALLY POINTED AT BOTH ENDS, SHORT PETIOLES:

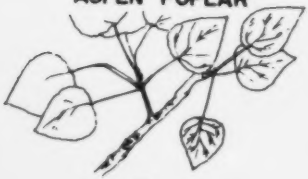
WILLOW
p. 28



LEAF OVATE TO OVAL

1 SHARP-POINTED TIP, LEAF STEM SLENDER AND FLATTENED:

ASPEN POPLAR

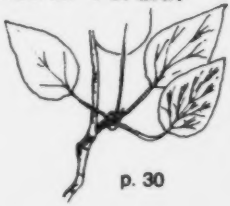


p. 29

LEAF ELLIPTICAL TO OVAL

1. LEAF STEM STOUT AND ROUND, DISTINCT RUST-COLORED RESIN PATCHES UNDERNEATH:

BALSAM POPLAR



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BROADLEAF

ALTERNATE

SIMPLE

TOOTHED MARGIN

TEETH FINE OR MEDIUM

TEETH MEDIUM

FULLY TOOTHED MARGIN

PARTIALLY TOOTHED MARGIN

1 LEAF ELLIPTICAL TO OBOVATE, DARK GREEN, SMOOTH SURFACE; POINTED TEETH NEAR LEAF TIP:

SASKATOON

p. 36

LEAF TIP ACUTE

1 DOUBLE OR IRREGULAR SAW-TEETH ON MARGIN, PROMINENT VEINS, SHINY SURFACE:

GREEN ALDER

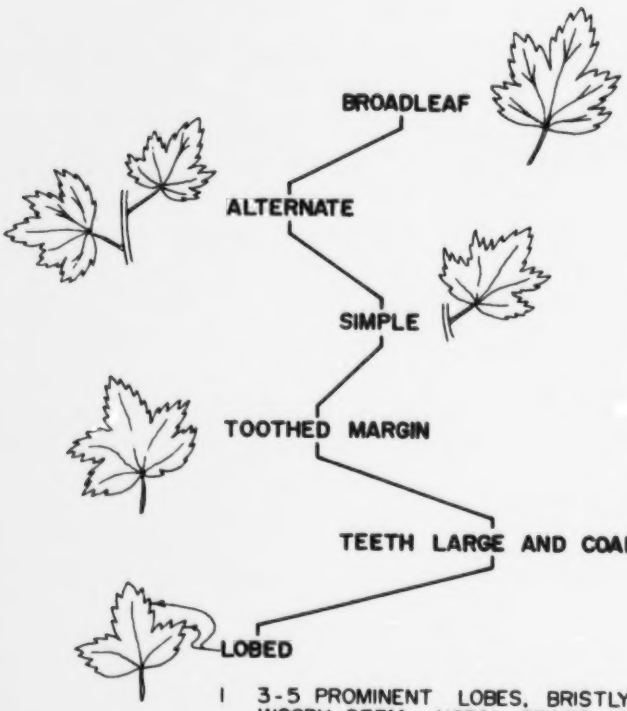
p. 34

LEAF TIP ACUMINATE

1 IRREGULAR SAW-TEETH ON MARGIN, DULL GREEN SURFACE:

BEAKED HAZELNUT

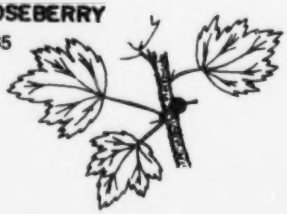
p. 31



1 3-5 PROMINENT LOBES, BRISTLY WOODY STEM, NODAL SPINES USUALLY PRESENT:

WILD GOOSEBERRY

p. 35



BROADLEAF

ALTERNATE

SIMPLE

TOOTHED MARGIN

TEETH LARGE AND COARSE

NOT LOBED

LEAF ROUND TO OBOVATE

1 DULL GREEN, TEXTURED SURFACE; ROUNDED TEETH ON MARGIN, NO TEETH AT BASE; PROMINENT WHITE DOTS (RESIN GLANDS) ON STEMS:

SWAMP BIRCH

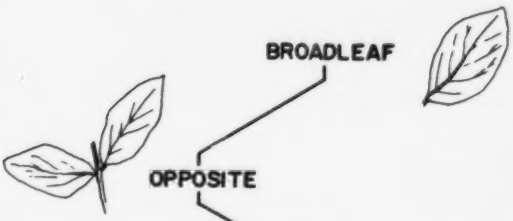
p. 33

LEAF OVATE

1 DULL GREEN, TEXTURED SURFACE; SERRATED MARGIN, BASE USUALLY WITHOUT TEETH; SCALY, PURPLE-RED TO WHITE, THIN BARK:

WHITE BIRCH

p. 32



BROADLEAF

OPPOSITE

SMOOTH MARGIN

PETIOLE ABSENT OR VERY SHORT

UPPER LEAVES JOINED

1 CLIMBING VINE; LEAF OBOVATE, HAIRY UNDERSIDE:

TWINING HONEYSUCKLE

p. 48

UPPER LEAVES SEPARATE

1 UPRIGHT SHRUB; LEAF OBOVATE, SLIGHTLY HAIRY UNDERSIDE WITH PROMINENT MID-VEIN:

BRACTED HONEYSUCKLE

p. 47

BROADLEAF

OPPOSITE

SMOOTH MARGIN

PROMINENT PETIOLE

LEAF NARROW, LINEAR

1. LEAF OLIVE COLORED WITH SILVER UNDERSIDE: OCCASIONALLY RUST-BROWN SPOTS ON UNDERSIDE:

CANADIAN BUFFALO-BERRY

p. 43

LEAF OVAL TO OVATE

1. LEAF LARGE AND SHARPLY POINTED, PROMINENT ARCHING VEIN CURVING TOWARD TIP; RED-PURPLE STEMS:

RED OSIER DOGWOOD

p. 44

2. LEAF SMALL, THICK AND LEATHERY; HAIRY UNDERSIDE:

BUCKBRUSH

p. 49

BROADLEAF

OPPOSITE

TOOTHED MARGIN

LEAF SHALLOWLY 3-LOBED, COARSELY TOOTHED:

LOW-BUSH CRANBERRY

p. 50

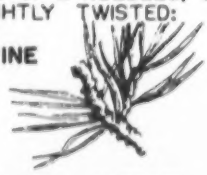
NEEDLE LEAF

SHEATHED NEEDLE BUNDLES

1 BUNDLES OF 2 NEEDLES, STRAIGHT TO SLIGHTLY TWISTED:

JACK PINE

p. 22



2 BUNDLES OF 2 NEEDLES, SPIRAL AND PROMINENTLY TWISTED:

LODGEPOLE PINE

p. 23

NEEDLE LEAF

UNSHEATHED NEEDLES

NEEDLES ATTACHED SINGLY

NEEDLES ATTACHED IN CLUSTERS OF OVER 10

1. SOFT, FLAT NEEDLES, APPROX. 1 IN. LONG:

LARCH OR TAMARACK

p. 24

NEEDLES 4-ANGULAR IN CROSS-SECTION

1. APPROX. ½ IN. LONG NEEDLES, BLUNT TIPPED, STIFF; FINE RED HAIRS OFTEN PRESENT ON TWIG:

BLACK SPRUCE

p. 26

2. APPROX. 1 IN. LONG NEEDLES, SHARP-POINTED, STIFF, PRODUCING STRONG AROMATIC ODOR WHEN CRUSHED:

WHITE SPRUCE

p. 25

NEEDLES FLAT IN CROSS-SECTION

1 APPROX. 1 IN. LONG NEEDLES, BLUNT TIPPED, WHITE BANDS UNDERNEATH

BALSAM FIR

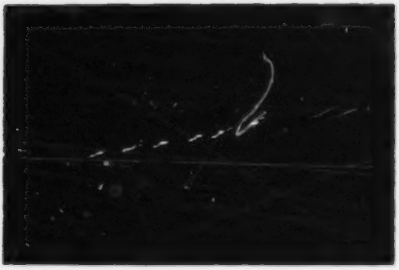
p. 27

Jack Pine

Pinus banksiana Lamb.

Photo by J. Hrapko

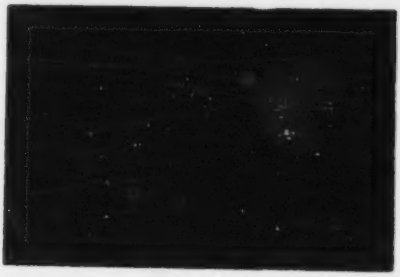
Photo by J. Hrapko



TREE: Small shrubby evergreen on open sites, somewhat taller in dense stands. Bark reddish-brown with irregular scaly ridges. Lower branches wide spreading. SIZE: 5-20 m (16-65 ft.) high; trunk 20-30 cm (8-12 in.) in diameter. LEAVES: Needle-shaped, in bundles of 2, generally divergent, 2-5 cm (¾-2 in.), yellowish-brown. CONES: Conical, 3-5 cm (1-2 in.) long, strongly incurved, generally in pairs, directed toward the tip of the branch, without prickles. DISTRIBUTION: Common on sandy and gravelly sites in central and northern Alberta. NOTES: Lodgepole Pine (*P. contorta* Dougl.) and Jack Pine hybridize freely where the ranges of these two species overlap in central Alberta.

Lodgepole Pine

Pinus contorta Loudon



TREE: Tall, slender evergreen, with little taper and straight trunk. Bark orange-brown, somewhat scaly, less than 2 cm (½ in.) thick. Branches curve upwards; self pruning in pure stands. SIZE: 20-30 m (65-100 ft.) high; trunk 30-45 cm (12-18 in.) in diameter. LEAVES: Needle-shaped, in bundles of two, 2½-8 cm (1-3 in.) long, spirally twisted, stiff, very sharp pointed, yellowish-green; form dense clusters toward the ends of twigs. CONES: Short-cylindrical to egg-shaped, curved away from branch tip, 2-5 cm (1-2 in.) long, remain on trees for many years; scales armed with small prickles. DISTRIBUTION: Grows on a wide variety of sites but prefers well drained sandy soils in the western part of the province. It is abundant in the Rocky Mountain and foothill regions. NOTES: Lodgepole Pine (*P. banksiana* Lamb.) and Jack Pine hybridize freely where the ranges of these two species overlap in central Alberta. As of May 1984, Lodgepole Pine is the official provincial tree of Alberta.

Tamarack

Larix laricina (Du Roi) K. Koch

Larch

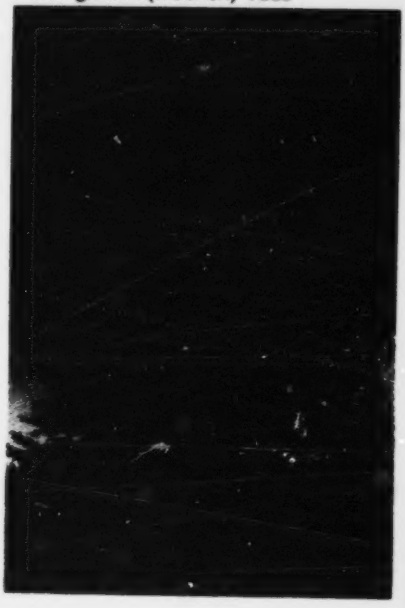
Photo by D. Johnson

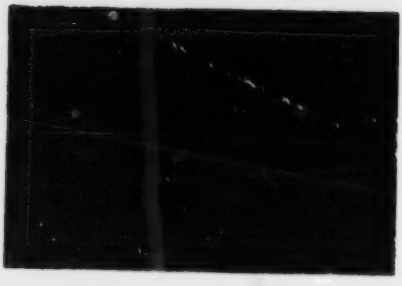
Photo by D. Griffin

TREE: Slender with a straight trunk having little taper. Bark thin, smooth, and grey when young becoming dark reddish-brown and scaly when older. Branches curved slightly downwards. SIZE: 20 m (65 ft.) high; trunk 30-60 cm (1-2 ft.) in diameter. LEAVES: Needle-shaped, in feather-like clusters of 10-20; 2-4 cm (¾-1½ in.) long, soft, flexible; pale green turning bright yellow in autumn; shed in autumn. CONE: 1½ cm (1½ in.) long, reddish when young becoming brown when mature; open in the autumn and persist on tree through the winter and following summer. DISTRIBUTION: Found in muskeg or swamp areas in central and northern Alberta. In northern Alberta it can also be found on better drained sites such as valley slopes. NOTES: Lyall's or Subapline Larch *(L. lyallii* Parl.) is found in the subalpine zone in the mountains, from Lake Louise to the Montana border.

White Spruce

Picea glauca (Moench) Voss



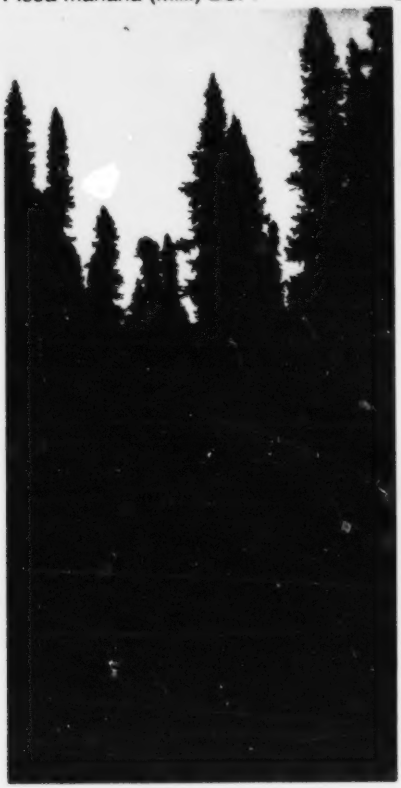


TREE: Dense evergreen with a straight, tapered trunk. Bark scaly, thin, grey to ashy-brown. Branches horizontal. SIZE: Averages 25 m (80 ft.) high; trunk 65 cm (2 ft.) in diameter. Under favorable conditions 40 m (130 ft.) high; trunk 130 cm (4 ft.) in diameter. LEAVES: Needle-shaped, 4-sided, 2-3 cm (1-1¼ in.) long, straight, stiff, sharp pointed, bluish-green; aromatic when crushed. CONES: Cylindrical, 4-5 cm (1½-2 in.) in length, located at the ends of twigs; yellow when young turning brown when mature, smooth margins. Cones open in the autumn and drop during the winter or spring. DISTRIBUTION: Common throughout western, central, and northern Alberta. It is found in a variety of soil types and climatic regions.

Black Spruce

Picea mariana (Mill.) BSP.

Bog Spruce, Swamp Spruce



TREE: Dense evergreen with a straight trunk. Bark thin, greyish-brown and scaly. Branches upturned at ends forming a distinctive club-like shape at the crown. SIZE: Averages 10 m (35 ft.) high; trunk 25 cm (10 in.) in diameter. Under favorable conditions 30 m (100 ft.) high; trunk 92 cm (36 in.) in diameter. LEAVES: Needle-shaped, 4-sided, 1-2 cm (½-¾ in.) long; straight, thick, stiff, blunt, bluish green. CONES: Spherical, 2-3 cm (½-1½ in.) in length, purplish to dark brown; usually several in a cluster; retained for one or more years. DISTRIBUTION: Most common in swamp areas or muskegs throughout central and northern Alberta.

Balsam Fir

Abies balsamea (L.) Mill.

TREE: Symmetrical with narrow, conical crown. Bark smooth, pale grey and blistered on young trees, rough, scaly and brown on older trees. Branches horizontal. SIZE: 18 m (60 ft.) high; trunk 45 cm (1½ ft.) in diameter. LEAVES: Needle-shaped, flattened, 2-3 cm (¾-1¼ in.) long, bent upward, rounded or blunt tipped; dark shiny green surface and whitish underside. CONES: Oval or oblong, 5-10 cm (2-4 in.) long, dark purple; disintegrate on tree and do not fall. DISTRIBUTION: Common tree in northeastern Alberta which has adapted to a variety of soils and climates. NOTES: Subalpine Fir *(A. lasiocarpa* (Hook.) Nutt.), a mountain species, is similar in appearance to Balsam Fir. It is larger, 25 m (76 ft.) high, and its leaves are greyish-green to pale blue-green. Subalpine Fir is mainly distinguishable from Balsam Fir by slight differences in their cones.

Willows

Salix L.

Photo by D. Johnson

SHRUBS-SMALL TREES: Variable in size and form, many branches; bark yellowish-brown to reddish-brown to grey, smooth or scaly. SIZE: 1-9 m (3-30 ft.) high. LEAVES: Alternate, simple, long and narrow, pointed at both ends; most species have small fine teeth on margins. FLOWERS: Greenish female (seed) catkins; yellowish male (pollen) catkins. FRUIT: Capsules in catkins. DISTRIBUTION: Willows are sun loving and are found throughout Alberta, mainly along the edges of lakes, rivers and in wetter areas. Among the many species in Alberta, common ones are: BEAKED WILLOW *(S. bebbiana* Sarg.) — 1-4 m (3-12 ft.) high; slender, reddish-brown branches; leaves 2-5 cm (1-2 in.) long, 1-2 cm (½-¾ in.) wide; 6 cm (2½ in.) long catkins, which appear shortly before or at the same time as the leaves. HOARY WILLOW: *(S. candida* Fluegge *ex* Willd.) — 1-2 m (3-6 ft.) high; slender branches with white woolly twigs; leaves, 4-7 cm (1¾-2¾ in.) long, hairy underside; catkins appear the same time as leaves. PUSSY WILLOW: *(S. discolor* Muhl.) — 2-5 m (6-16 ft.) high; slender reddish-brown branches, greyish-brown stems; leaves 5-8 cm (2-3 in.) long, 2-4 cm (¾-1¼ in.) wide, shiny green upper surface, paler underside; catkins appear before leaves. SANDBAR WILLOW *(S. exigua* Nutt.) — 1-4 m (3-13 ft.) high; greyish-brown stems and branches; leaves variable 3-15 cm (1¼-6 in.) long, 3-15 m (⅛-½ in.) wide, shiny dark green surface, pale green underside; catkins 2-6 cm (¾-2½ in.) long, appear same time as leaves.

Aspen Poplar

Populus tremuloides Michx.

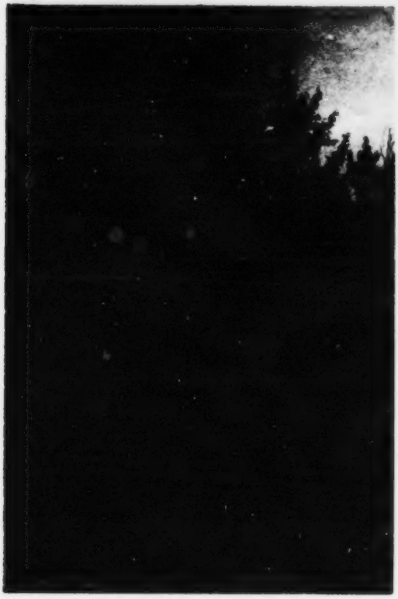
Trembling Aspen, White Poplar

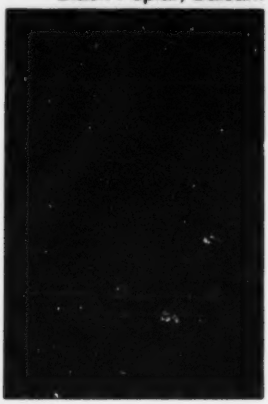
TREE: Slender with a long straight trunk and rounded crown. Bark smooth, greenish-white on young trees becoming somewhat blackened and furrowed near base on older trees. Branches restricted to tops on mature trees. SIZE: Averages 20 m (65 ft.) high; trunk 25 cm (10 in.) in diameter. Under favorable conditions 30 m (95 ft.) high; trunk 61 cm (2 ft.) in diameter. LEAVES: Alternate, simple, oval to ovate, 4-6 cm (1½-2½ in.) wide; fine, irregular, rounded teeth on margin; slender, flattened petiole, usually longer than the leaf-blade; deep green upper surface, paler underside. FLOWERS: Small, hairy, drooping catkins appear before the leaves. FRUIT: Small, green capsules splitting when ripe to form a cotton mass. DISTRIBUTION: Very common and widespread throughout forested regions, but grows best in well drained soils. NOTES: Leaves tremble with slight breezes because of flattened leaf petioles. This tree suckers freely when cut or damaged. Root suckering is the primary method of propagation.

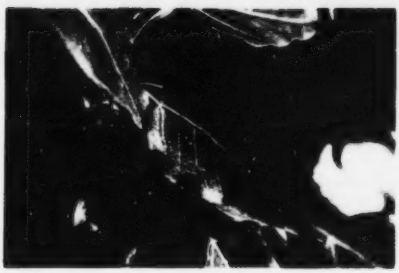
Balsam Poplar

Populus balsamifera L.

Black Poplar, Balsam







TREE: Slender, with a long, straight, trunk and narrow crown. Bark light grey and smooth on young trees, dark grey and furrowed on mature trees. Branches stout, pointing upward. SIZE: Averages 20 m (65 ft.) high; trunk 40 cm (16 in.) in diameter. Under favorable conditions 30 m (100 ft.) high; trunk 120 cm (4 ft.) in diameter. LEAVES: Alternate, simple, ovate to ovatelanceolate, 8-15 cm (3-6 in.) long; fine, irregular, rounded teeth on margin; shiny dark green surface, with whitish-green underside sometimes with rusty brown resin stains; winter buds large and pointed and covered with sticky resin. FLOWERS: Small, drooping catkins, appear before the leaves. FRUIT: Small, green capsules splitting when ripe to form large amounts of loose cotton mass that is blown about by spring breezes. DISTRIBUTION: Common and widespread throughout most of Alberta but grows best on rich, moist soils and low lying terrain. NOTES: A similar species, called Black Cottonwood *(P. trichocarpa* Hook.), is found in the western parts of the province. It is very difficult to differentiate from Balsam Poplar because both species hybridize freely. Balsam Poplar readily suckers when the main trunk is cut or damaged.

Beaked Hazelnut

Corylus cornuta Marsh.

Beaked Hazel, Beaked Filbert

Photo by D. Blackmore

Photo by D. Griffin

SHRUB: Comprised of many slender erect stems with numerous branches. Bark rough, light brown. SIZE: 1-3 m (3-10 ft.) high. LEAVES: Alternate, simple, ovate, gradually tapering to a point, 5-20 cm (2-4 in.) long, coarsely-toothed margins; dull green surface, with paler underside, hairy along veins. FLOWERS: Small, hanging, yellow male catkins and tiny reddish female flowers on the branch tips above; appear in spring before the leaves. FRUIT: A nut, enclosed in two rough-hairy green bracts, which extend beyond nut to form a beak. DISTRIBUTION: Found in central and northern parts of the province. It grows well in open areas or in the shade and prefers well-drained sites.

White Birch

Betula papyrifera Marsh.

Paper Birch, Canoe Birch

Photo by Alberta Forest Service

TREE: Small to medium sized. Crown oval when associated with other trees and pyramidal in the open. Branches slender, twisted, pebbled, reddish-brown. Bark smooth, reddish-brown turning white with age, peels easily. SIZE: Averages 6-15 m (20-50 ft.) high; trunk 20-30 cm (8-13 in.) in diameter. Under favorable conditions 18-25 m (60-80 ft.) high; trunk 40-50 cm (16-20 in.) in diameter. LEAVES: Alternate, simple, ovate, tapering to a sharp point; 2-9 cm (¾-3½ in.) long; margins saw-toothed except near the base; dull green surface with paler, slightly hairy underside. FLOWER: Drooping, greenish-brown catkins. FRUIT: Cone-like catkins, 2-4 cm (½-1½ in.) long, 1 cm (½ in.) in diameter. DISTRIBUTION: Common along riverbanks and moist, wooded areas throughout Alberta. Prominent in the forested regions in the central and northern parts of the province.

Swamp Birch

Betula pumila L.

Bog Birch, Dwarf Birch

SHRUB: Bushy with many branches, erect or low spreading, densely covered with leaves and wart-like resinous-glands. SIZE: 1-2 m (3-7 ft.) high. LEAVES: Alternate, simple, obovate, 2-3 cm (¾-1¼ in.) long; rounded teeth on margins; dark green and shiny surface, light green underside; young leaves have fine hairs underneath. FLOWERS: Slightly hairy catkins, appear in spring, 2-3 cm (¾-1¼ in.) long. FRUIT: Brown, cone-shaped catkins containing small winged nutlets. DISTRIBUTION: Common around bogs and swampy areas in forested regions of the province.

Green Alder

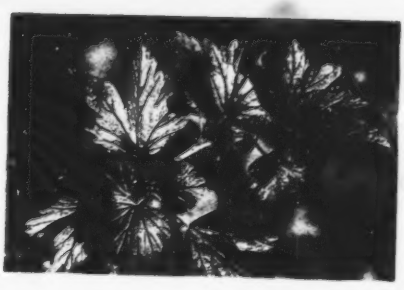
Alnus crispa (Ait.) Pursh.

Photo by D. Blackmore

SHRUB: Bushy, with upward curving branches. Bark smooth, reddish-brown or grey. Stems and twigs covered with white dots. SIZE: 1-3 m (3-10 ft.) high. LEAVES: Alternate, simple, ovate, 2-8 cm (1-3 in.) long; fine, sharp double toothed margins; prominent veins, shiny green surface, paler underside; sticky when young. FLOWERS: Light green catkins which develop before the leaf buds open; female catkins 1-1½ cm (½-¾ in.) long; male catkins 7-13 cm (3-5 in.) long. FRUIT: Small, cone-like catkins on long stalks; several in a cluster; green turning brown and woody at maturity; nutlets with wings. NOTES: The River Alder *(A. tenuifolia* Nutt.) and the Speckled Alder *(A. rugosa* (Du Roi) Spreng.) are closely related to the Green Alder and are also found in Alberta. The River and Speckled Alder can grow up to 6 m (20 ft.) high, and have slightly different leaf margins.

Wild Gooseberry

Ribes oxyacanthoides L.



SHRUB: Small, erect, several stems originating from root collar. New growth bright green, covered with numerous bristles. Old growth yellowish-grey. Sharp spines at base of leaves. SIZE: ¾-1¼ m (2-4 ft.) high. LEAVES: Alternate, simple, 3-5 lobes, 3-5 cm (1¼-2 in.) long; round toothed margins; light green surface, lighter hairy underside. FLOWERS: Greenish-white, small, bell-shaped; single or in clusters. FRUIT: Round berry, with white stripes; light green turning reddish-purple with age. DISTRIBUTION: Wild Gooseberry is found throughout Alberta and prefers to grow in openings on moist rich soil. NOTES: Northern Gooseberry (*R. Lirtellum* Michx.) differs from Wild Gooseberry in that it does not have bristles on the stem and is only found in northern and central Alberta. Many currants and gooseberries are similar in appearance to the Wild Gooseberry. Generally currants, such as Wild Red Currant (*R. triste* Pall.), have unarmed stems while gooseberries are armed.

Photo by D. Griffin

Saskatoon

Amelanchier alnifolia Nutt.

Saskatoon-berry, June-berry, Service-berry, Shedbush

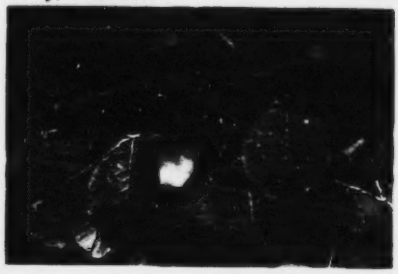


Photo by D. Griffin

SHRUB: Tall, somewhat slender, may be dwarfed or misshaped. Bark rough, greyish-brown. SIZE: Averages 1-3 m (3-10 ft.) high; under favorable conditions 4-6 m (13-20 ft.) high. LEAVES: Alternate, simple, small, oval, with rounded tips; 1-5 cm (½-2 in.) long; bluish-green in color; coarse teeth on margin especially near tip; many fine hairs on the underside of new leaves, becoming smooth and hairless with age. FLOWER: White, with five petals; 1 cm (½ in.) in diameter; in dense terminal clusters. FRUIT: Berry-like, 1 cm (½ in.) in diameter; blue to dark purple when ripe; in clusters at end of branch. DISTRIBUTION: Found in open woods, bluffs, along the edge of forest, stream banks and along roadsides. This plant prefers dry sites and good exposure to the sun. It is commonly found throughout Alberta. Colonies are sometimes formed because of its ability to sucker.

Shrubby Cinquefoil

Potentilla fruticosa L.

Photo by D. Griffin

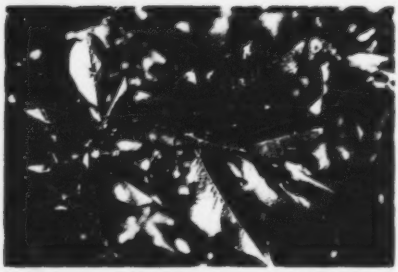
SHRUB: Low growing with many bushy branches. Bark is rough and shredded, particularly on older branches. SIZE: ½-1 m (1-3 ft.) high. LEAVES: Alternate, compound, composed of 5-7 grey-green leaflets; each leaflet approximately 2 cm (¾ in.) long; smooth margins, oblong, with a velvet-like texture. FLOWERS: Yellow, 5 petals; 1½-2½ cm (¾-1 in.) in diameter, usually in clusters at each branch tip. FRUIT: Seeds covered by fine straight white hairs. DISTRIBUTION: This plant is most commonly found in Alberta's grassland and foothill regions, but is also present in other parts of the province. In the forest it prefers poorly drained sites.

Pin Cherry

Prunus pensylvanica L.f.

Photo by J. Hrapko

Photo by D. Johnson



SHRUB OR SMALL TREE: Fairly straight, with narrow rounded crown. Branches point upwards. Bark reddish-brown, smooth on young trees, marked by orange, horizontal dots on older trees. SIZE: 3-8 m (10-25 ft.) high. LEAVES: Alternate, simple, ovate, with sharp pointed tip; 5-12 cm (2-5 in.) long; petioles red; fine, uneven teeth on margins; shiny dark green surface, pale green underside. FLOWERS: White, small ½-1 cm (¼-⅜ in.) in diameter; in clusters, each on a long stalk; appear the same time as leaves. FRUIT: Small, round, bright red cherry, each on a single pin-like stem. DISTRIBUTION: Found in open woods, bluffs, and along river banks throughout Alberta. It is intolerant of shade and, therefore, is seldom found in mature forests.

Choke Cherry

Prunus virginiana L.

Photo by D. Griffin

Photo by J. Hrapko

SHRUB OR SMALL TREE: Irregularly shaped, with a slender, twisted trunk. Crown narrow and irregular and composed of crooked, spreading branches. Bark smooth, reddish-brown turning black on older growth. SIZE: 2-8 m (6-25 ft.) high. LEAVES: Alternate, simple, ovate, with a sharp point; 2-8 cm (1-3 in.) long; finely toothed along margins; dark green surface, paler green underside; thick and leathery. FLOWERS: Creamy-white, small, 1-1½ cm (½-¾ in.) in diameter; form dense, cylindrical clusters at ends of twigs. FRUIT: Small, round, deep red to dark purple, 6-8 mm (¼-⅓ in.) in diameter; form clusters with common stem. DISTRIBUTION: Common in bluffs, ravines, open areas, and along river banks and roadsides throughout Alberta. Can tolerate very dry conditions on the prairies. NOTES: The underground root system suckers freely.

Prickly Wild Rose

Rosa acicularis Lindl.

Photo by D. Griffin

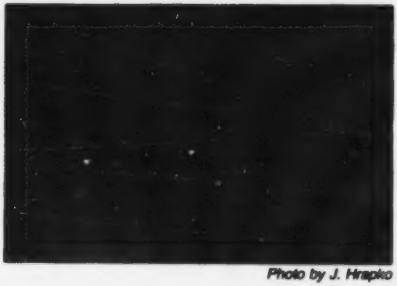


Photo by J. Hrapko

SHRUB: Bushy, with straight, weak prickles densely covering the branches to the tips of new growth. SIZE: ¼-1 m (1-3½ ft.) high. LEAVES: Alternate, compound, oval, with 5 to 7 leaflets per stem; leaflets 1-5 cm (½-2 in.) long, coarse teeth along margins; dark green surface with paler hairy underside. FLOWERS: Pink, with 5 petals; 5-7 cm (2-3 in.) in diameter. FRUIT: Rose hips; oval, bright red to orange, about 2 cm (¾ in.) long. DISTRIBUTION: Common in or at edges of open forests and along roadways and waterways throughout the province, except the southeastern prairie. NOTES: The Prickly Wild Rose is Alberta's floral emblem. However, two other rose species are commonly found in Alberta: Common Wild Rose *(R. woodsii* Lindl.) and Prairie Rose *(R. arkansana* Porter). These species are similar in appearance to the Prickly Wild Rose.

Wild Red Raspberry

Rubus idaeus L.

Photo by J. Hrapko

SHRUB: Pronounced main stem covered with prickles. Bark reddish-brown. SIZE: 1-2 m (3-6 ft.) high. LEAVES: Alternate, compound, with 3-5 ovate leaflets; leaflets 5-10 cm (2-4 in.) long; crinkly, deeply toothed along margins; dark green surface with paler, hairy underside. FLOWERS: White, with 5 petals; 8-12 mm (⅓-½ in.) in diameter, attached to a hairy stalk. FRUIT: Red, round, juicy, edible, compound berry composed of many small sections; lumpy in appearance. DISTRIBUTION: This plant grows well in cleared areas, in borders around wooded areas and along riverbanks and roadways throughout Alberta. It is tolerant of some shade. If the stem tips become buried, roots will develop and another shrub will grow. NOTES: There are other less common raspberry species in the province including some dwarf species. None of these grow higher than 2 m (6 ft.).

Wolf Willow

Elaeagnus commutata Bernh. *ex* Rydb.

Silver-berry, Silver Buffalo-berry

Photo by D. Johnson

Photo by J. Hrapko

SHRUB: Grows erect, usually in thickets. Bark copper-brown, finely pebbled. SIZE: 1-3 m (3-12 ft.) high. LEAVES: Alternate, simple, oblong, 2½-8 cm (1-3 in.) long, smooth margins; silvery-grey surface, lighter underside with brownish scales. FLOWERS: Silvery-yellow, without petals; 3 mm (⅛ in.) in diameter, in clusters of 2 or 3. FRUIT: Pale silvery-green, round to oval, dry and mealy, containing a large stony seed. DISTRIBUTION: This plant prefers sand or gravelly soils and is common on valley slopes, hillsides, and in open fields throughout Alberta. In heavily grazed areas this plant spreads quickly; however, it remains sparse in the wild. Root suckering is a means by which it can propagate itself.

Canada Buffalo-Berry

Shepherdia canadensis (L.) Nutt.

Soapberry, Soopalalie

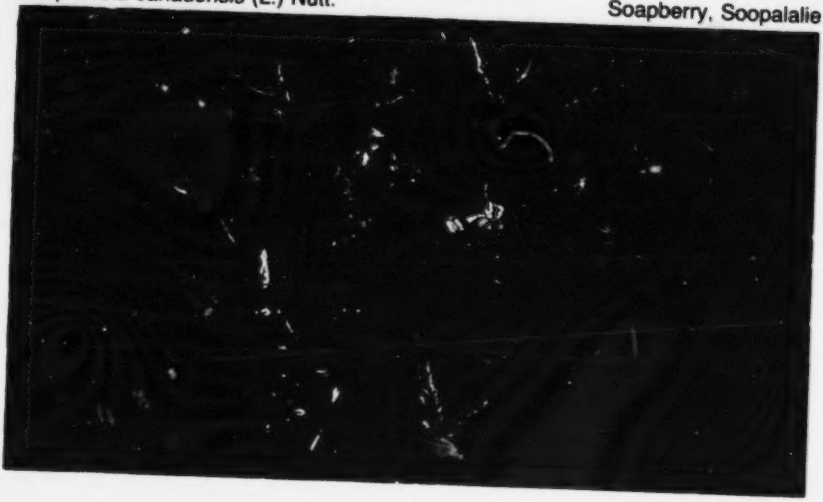


Photo by J. Hrapko

SHRUB: Sprawling, bushy appearance with several stems originating from root collar. Bark grey to black, covered with pebbly, rusty-brown scales. SIZE: ½-3 m (2-10 ft.) high. LEAVES: Opposite, simple, oblong, 2-5 cm (¾-2 in.) long, smooth margins; upper surface smooth, olive green; undersides silvery, with fine star-shaped hairs and rusty-brown spots. FLOWERS: Small, inconspicuous, yellowish-green, 4 mm (¼ in.) in diameter, situated at leaf nodes; appear before leaves develop. FRUIT: Yellow to orangy-red berries, 4-6 mm (¼ in.) in diameter, in clusters along stem. DISTRIBUTION: This plant is common throughout the forested regions of the province and along river banks. It prefers well-drained sites.

Red-Osier Dogwood

Cornus stolonifera Michx.

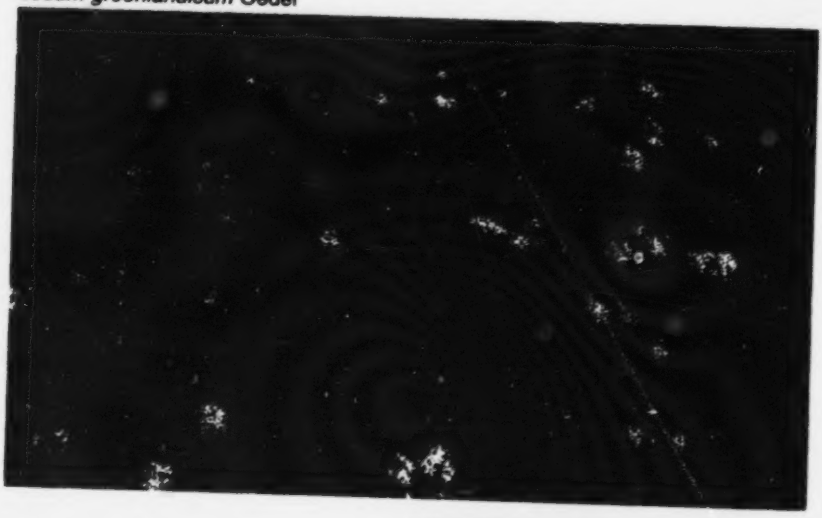
Dogwood

Photo by J. Hrapko

SHRUB: Straggling appearance, several stems originating from root collar. Bark red (especially in winter), with white dots on older growth. SIZE: 1-2 m (3-6 ft.) high. LEAVES: Opposite, simple, ovate, 2-8 cm (1-3 in.) long, smooth margins, prominent veins; shiny, dark green surface; underside paler with short hairs. FLOWERS: White, small, several in a flat terminal cluster; clusters 2½-5 cm (1-2 in.) in diameter. FRUIT: Round, greyish-white berry (drupe), about 5 mm (¼ in.) in diameter; several drupes in terminal cluster. DISTRIBUTION: This shrub is found throughout most of Alberta and prefers moist areas. It is commonly found in hardwood forests and along the sides of streams. It can spread by root suckering.

Labrador Tea

Ledum groenlandicum Oeder



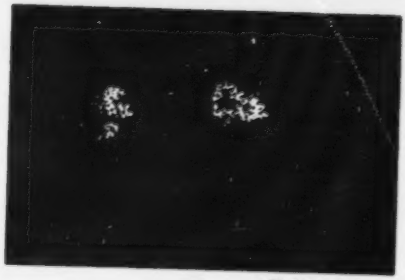


Photo by J. Hrapko

SHRUB: Low growing, erect, with many branches covered with brown, velvety hairs. SIZE: ¼-1 mm (1-3 ft.) high. LEAVES: Alternate, simple, leathery, oblong, 1-5 cm (½-2 in.) long; smooth margins rolled down toward underside of leaf; dark green surface; underside rusty-woolly. FLOWERS: White, small with 5 petals, 6 mm (⅓ in.) in diameter; in dense round-topped clusters. FRUIT: Dry, oblong capsules in clusters at the ends of the branches. DISTRIBUTION: This plant is generally found in muskegs and moist coniferous woodlands in Alberta.

Common Blueberry

Vaccinium myrtilloides Michx.

Blueberry

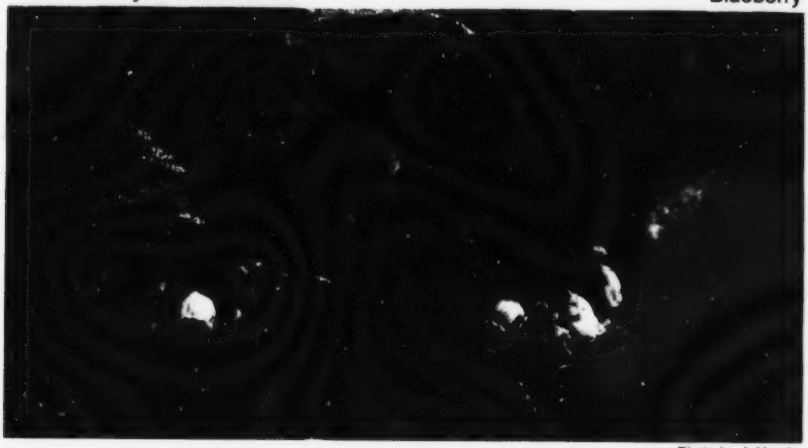


Photo by J. Hrapko

Photo by J. Hrapko

SHRUB: Low-growing shrub, usually in dense mats, with many woody, finely hairy branches thickly covered with leaves. Bark reddish-brown turning grey with age. SIZE: ¼-¾ m (1-2 ft.) high. LEAVES: Alternate, simple, thin, elliptical, 1-4 cm (¾-1½ in.) long, covered with short, soft hairs; tend to hide flowers and fruit. FLOWERS: Pink or white, bell-shaped, 4-5 mm (¼ in.) in diameter; in clusters. FRUIT: Blue berry with a whitish powdery covering, 5-6 mm (¼ in.) in diameter. DISTRIBUTION: Blueberries grow well on dry acidic soils of coniferous woods and on open or thinly wooded hillsides throughout the province, especially in sandy areas. NOTES: There are four other shrubs found in Alberta which are very similar to the Common Blueberry. They are all low growing shrubs with juicy, tasty, edible berries.

Bracted Honeysuckle

Lonicera involucrata (Richards.) Banks

Black Twinberry, Swamp Honeysuckle

SHRUB: Bushy, with several, upward-pointing, hairy branches originating from the root collar. Light brown bark, turning grey with age. SIZE: 1-3 m (3-10 ft.) high. LEAVES: Opposite, simple, oval, 5-15 cm (2-6 in.) long, with a prominent mid-vein; shiny, green surface with a lighter, hairy underside. FLOWERS: Yellow, 1 cm (½ in.) long, paired; flanked by 2 or 4 leaf-like, green or red bracts. FRUIT: Purple or black berry, 7 mm (⅓ in.) in diameter; paired, flanked by deep red bracts. DISTRIBUTION: This plant prefers moist rich soil and is commonly found in the forest understory.

Twining Honeysuckle

Lonicera dioica L.

Photo by D. Griffin

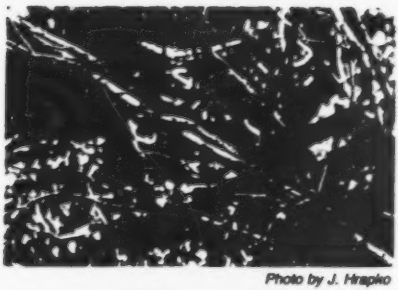


Photo by J. Hrapko

SHRUB: Vine-like; climbs on other trees and shrubs. Bark smooth and green, turning greyish-brown with age. SIZE: 1-2 m (3-6½ ft.) high. LEAVES: Opposite, simple, ovate, 5-9 cm (2-3¾ in.) long, short petioled; upper pairs united at bases; smooth, light green upper surface, with paler, hairy undersides. FLOWERS: Yellowish-orange, tubular, 2-2½ cm (¾-1 in.) long; in clusters at the branch tips. FRUIT: Round, red berry; in clusters at the branch tips. DISTRIBUTION: This plant grows in wooded areas. It prefers shade and rich moist soil.

Buckbrush

Symphoricarpos occidentalis Hook. Western Snowberry, Wolfberry

Photo by D. Johnson

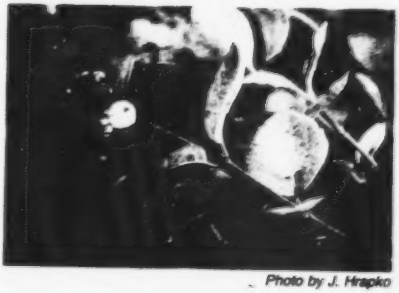


Photo by J. Hrapko

SHRUB: Bushy, and grows in clumps. The stems are hollow, light grey-brown and are covered with fine, downy hair. SIZE: 30-100 cm (1-3 ft.) high. LEAVES: Opposite, simple, broadly oval to ovate, 2-6 cm (1-2½ in.) long, thick and leathery; margins often wavy and occasionally coarsely toothed; light green surface, with paler hairy underside. FLOWERS: Small, bell-shaped, 6 mm (¼ in.) long, pinkish-white; form clusters at the ends of the stems. FRUIT: Greenish-white berries turning purplish with age, 8-10 mm (¼-⅓ in.) in diameter; in clusters at the end of the stems. DISTRIBUTION: This is one of the most common and widespread shrubs in Alberta. It is found throughout the province in many habitats but prefers dry, open areas. It can spread by root suckering. NOTES: Snowberry *(S. albus* (L.) Blake) is similar to Buckbrush. The leaves are simple, 1½-3 cm (¾-1¼ in.) long and thin with smooth margins. The surface of the leaf is pale green and the underside, since it is covered with white hairs, is lighter green. Snowberry is more common in wooded areas than is Buckbrush.

Photo by D. Blackmore

Low Bush Cranberry

Viburnum edule (Michx.) Raf.

Squashberry, Mooseberry, Low High-Bush Cranberry

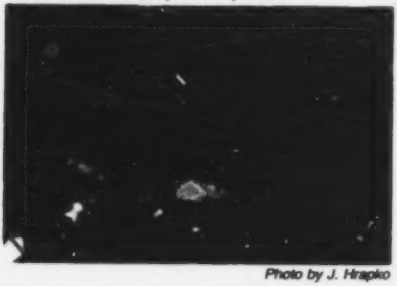
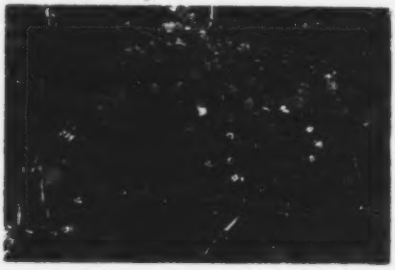


Photo by J. Hrapko



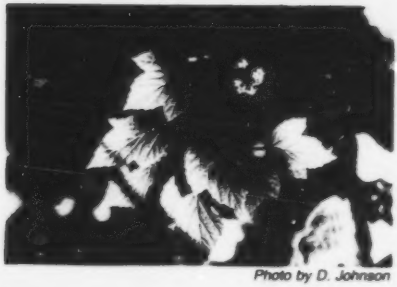


Photo by D. Johnson

Photo by D. Griffin

High-Bush Cranberry
(*V. opulus L.*)

SHRUB: Medium sized with several slender, smooth, reddish-grey branches. SIZE: ½-1¾ m (1½-6 ft.) high. LEAVES: Opposite, simple, 3-lobed, 4-10 cm (1½-4 in.) wide; toothed along margin; deeply veined, dark green surface; lighter, hairy underside. FLOWERS: Small, white, 5 petals; 7 mm (¼ in.) in diameter; in flat-topped clusters, 1-3 cm (½-1¼ in.) in diameter. FRUIT: Bright red berry, with a flat seed; 1 cm (⅜ in.) in diameter, in clusters. DISTRIBUTION: This plant prefers to grow in rich moist soils in heavily wooded areas. It is common and widespread in Alberta's forested regions. NOTES: High-Bush Cranberry *(V. opulus* L.) is similar in appearance to Low-Bush Cranberry. It can grow to 4 m (13 ft.) in height and can be distinguished from Low-Bush Cranberry by its deeply 3-lobed leaves. High-Bush Cranberry prefers to grow in forest openings and scrubby areas in river valleys and low areas.

The Importance of Shrubs to Wildlife

Shrub	Big Game	Birds
Willows	1	2
Beaked Hazelnut	1	1
Swamp Birch	2	2
Alders	3	2
Gooseberries & Currants	2	1
Saskatoon Berry	2	1
Shrubby Cinquefoil	2	2
Pin Cherry	2	1
Choke Cherry	2	1
Rose	1	1
Raspberry	2	1
Wolf Willow	2	2
Canada Buffalo-Berry	3	1
Red-Osier Dogwood	1	1
Labrador Tea	3	3
Blueberry	2	1
Honeysuckle	2	2
Buckbrush	2	1
Cranberry	1	1

SCALE: 1 = very important
2 = moderately important
3 = not important

Table supplied by
B. Stubbs, Alberta Fish & Wildlife

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